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ISOLATED DNA ENCODING CULLIN REGULATORS ROC1 AND ROC2, ISOLATED PROTEINS ENCODED BY SAME, AND METHODS UTILIZING THE SAME

ABSTRACT

The present invention provides isolated polynucleotide sequences encoding the proteins ROC1 and ROC2, the isolated proteins themselves, expression vectors containing at least a fragment of the ROC1 and ROC2 polynucleotide sequences, and host cells comprising the same. Methods of producing the ROC1 and ROC2 proteins are also disclosed, and methods of detecting the polynucleotides in samples are included in this invention, as are antibodies to the ROC1 and ROC2 proteins and antisense molecules complementary to polynucleotides encoding the same. The present invention further includes methods for screening bioactive agents that are capable of binding to a ROC protein, methods of screening bioactive agents capable of interfering with the binding of ROC proteins, and methods of screening bioactive agents capable of modulating the activity of a ROC protein. Such screening methods are capable of identifying compounds that have pharmacological. Pharmaceutical formulations comprising such pharmacologically active compounds and methods of administering the same are an additional aspect of this invention.